

## **Role of Personal Bankruptcy Exemption Laws on Mortgage Availability\***

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## **Role of Personal Bankruptcy Exemption Laws on Mortgage Availability**

### **Abstract**

We investigate the relationship between bankruptcy exemption laws and the availability of credit for first and second mortgages (home equity loans and lines). We follow a bank-specific approach as advocated by Stengel and Glennon (1999) to test this relationship, using application data from multiple financial institutions. The data sets are unique and include a number of financial and demographic variables that are lacking in other studies on this topic. We show that after controlling for all financial and economic variables, the availability of credit *does not* fall for first and second mortgages originated in states with higher bankruptcy exemption levels.

Key Words: Bankruptcy Exemptions Law, Mortgage, Home Equity Line, Home Equity Loan

## 1. Introduction

The Bankruptcy Abuse Prevention and Consumer Protection Act of 2005 was enacted to reduce a debtor's ability to take advantage of what some considered lenient bankruptcy laws in the U.S. For example, the act makes a "fresh start" unavailable for bankruptcy filers unless their household income is below the median level in their state of residence. In addition, given the recent mortgage foreclosures and the subsequent financial crisis, there has been a lot criticism about the "democratization" of consumer credit, which has resulted in over-indebtedness and a dramatic rise in individual bankruptcy filings.

These recent legal and financial developments in the U.S. have renewed the debate about the availability of credit for mortgages and how it is affected by the exemption level differences in the bankruptcy law provision (White, 2007).<sup>1</sup> A broader question of whether differences in states' bankruptcy exemption levels affect aggregate household credit (both secured and unsecured) has been studied by Gropp, Scholz, and White (1997); Berkowitz and Hynes (1999); Lin and White (2001); and Chomsisengphet and Elul (2006).<sup>2</sup> Homestead and personal property exemptions provide debtors with relief from creditors in case of formal bankruptcy proceedings, and in effect provide them with a chance for a fresh start. Homestead exemptions vary widely, from zero in two states to unlimited in seven states. About one-third of the states also allow their residents to choose between Federal bankruptcy exemptions and state's exemptions. In this article, we provide further empirical

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<sup>1</sup> Some studies have tested this hypothesis; that is, by making bankruptcy more attractive, large exemptions should lead to an increase in the filing rate. White (1987) found a positive relationship between the size of a state's exemption and the number of filings that was statistically significant but weak. Many other studies found either no statistically significant relationship or even a negative relationship between state exemption laws and the number of filings (for example, Peterson and Aoki, 1984; Buckley and Brinig, 1996; and Hynes, 1997).

evidence on the impact of consumer bankruptcy exemption laws on the availability of mortgage credit.

Gropp, Scholz and White (1997) argue that in states with high rather than low bankruptcy exemptions, the availability of credit falls because debtors are more likely to default and file for bankruptcy. They find empirical support for these predictions. In contrast, Berkowitz and Hynes (1999) have argued that in states with high bankruptcy exemptions, the availability of credit rises. They point to the fact that we need to distinguish between different types of debts<sup>3</sup> and different types of exemptions<sup>4</sup> for a thorough understanding of the relationship between personal bankruptcy exemption laws and credit availability for mortgage loans. Their argument is that, when debtors are in financial distress, they can file for bankruptcy, obtain a discharge on their nonmortgage debts, and use the funds that would otherwise go to nonmortgage creditors to repay their mortgages, thereby keeping their homes. The higher the exemption is, the greater the protection of debtors' wealth in bankruptcy (and therefore the lower the probability that they will default on their mortgages).<sup>5</sup>

Furthermore, Lin and White (2001) have developed a theoretical model of debtors' decisions to file for bankruptcy and to default on their mortgages; and they show that there is a positive relationship between personal property exemption levels and the

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<sup>2</sup> See also Agarwal, Liu, and Mielnicki (2002) and Agarwal et al.(2005) for empirical evidence on the impact of bankruptcy exemptions on consumer bankruptcy and small business bankruptcy, respectively.

<sup>3</sup> The different types of debts are secured versus unsecured debts. Secured debts—such as mortgages and automobile loans—allow the creditor to reclaim the collateral if the debtor defaults on the loan, while unsecured debts—such as credit card debt and installment loans—have no collateral.

<sup>4</sup> States provide separate exemptions for equity in owner-occupied homes (homestead exemptions) versus other types of property (personal property exemptions).

<sup>5</sup> See also Domowitz and Sartain (1999) and Barron, Elliehausen, and Staten (2000). Chatterjee, Corbae, Nakajima, and Rios-Rull (2007) incorporate simultaneously the role of household earnings and unsecured debt, as well as shocks to earnings, debt, and preference shocks (for example, divorce) in their theoretical household default/bankruptcy dynamic equilibrium model.

probability of borrowers being denied mortgage loans. They test their model empirically using Home Mortgage Disclosure Act (HMDA) data over the period 1992–97, and find strong and statistically significant support when using data with cross-state variation in bankruptcy exemption levels.

Chomsisengphet and Elul (2006) argue that an important variable in lending decisions—the credit history of the mortgage applicant—is ignored in the models of Gropp, Scholz, and White (1997); Berkowitz and Hynes (1999); and Lin and White (2001). Thus, all of their models suffer from an omitted variable bias. Chomsisengphet and Elul (2006) construct a model to show that by ignoring the impact of exemptions on credit scores, lenders will tend to overstate the riskiness of borrowers from high-exemption states. Thus, a regression that omits the credit score would indeed find that applicants from high-exemption states are more likely to be denied a mortgage. Empirically, Chomsisengphet and Elul (2006) show that, once they control for credit scores, exemptions are no longer relevant; our study is most closely related to this study

Here, we reexamine the effect of homestead exemption laws across states on availability of credit for first and second mortgages (home equity loans and lines), using a bank-specific approach as outlined by Stengel and Glennon (1999)—a study from the Office of the Comptroller of the Currency (OCC). Unlike the previous studies that have looked at this issue using the HMDA data set, we have also collected other variables that could be critical in evaluating mortgage applications at these financial institutions. To the best of our knowledge, this is the first such study to include bank-specific variables to determine availability of credit for mortgages.

To study the impact of state exemption laws on the availability of credit for first mortgages, we look at a stratified sample of 570 loan files from January to September 1999. We empirically test whether homestead exemptions across states play any part in the underwriting process for mortgages originated at a large financial institution, using a bank-specific approach. The results indicate that the dummies for homestead exemptions are statistically insignificant. These findings are robust and have withstood a variety of stress tests. These findings also show that individual borrower's financial and creditworthiness are the only determinants of being rejected or accepted for a home mortgage at this financial institution.

We also study the impact of state exemption laws on the availability of credit for second mortgages (home equity loans and lines). To do this, we look at a stratified sample of 3,237 loan files between January 2000 and June 2001 from another financial institution. Once again our results indicate that homestead exemption laws are statistically insignificant in credit availability decisions. In this paper, we have only focused on the availability of credit and not on the pricing of credit. Hence, it is possible that exemption laws affect the pricing of credit.

Our paper is structured as follows: In section 2, we describe the model specification and data; in section 3, we provide the results; and in section 4, we offer concluding remarks.

## **2. Model Specification and Data**

### **2.1 Model Specification**

We investigate whether the probability of being denied credit, in the form of a mortgage, is higher for individuals who live in states that have higher homestead exemption levels using a bank-specific approach. As discussed in Stengel and Glennon (1999), individual banks follow bank-specific underwriting guidelines to make mortgage lending decisions. Including bank-specific information significantly increased the explanatory power of their model. Furthermore, they conclude that banks maintain an array of bank-specific decision variables considered fundamental to their mortgage lending decision, but not considered—or at least not in the same manner—by other banks. For example, Stengel and Glennon (1999) found that closing costs of a home purchase (down payments, various taxes, a fee, and a sufficient cushion of liquid assets to pay for a couple of monthly mortgage payments) were treated differently at different banks. The HMDA data uses net wealth as a proxy for this measure. Net wealth, however, may be grossly inaccurate for this purpose. Hence, as discussed by Stengel and Glennon (1999), a bank-specific approach has to be employed in deciding the variables that are critical in the mortgage underwriting process for this financial institution.

The regression methodology used here to measure the probability of being denied credit and its relationship to the homestead exemption level is based on the following model of the mortgage decision:

$$\text{Pr } ob(y = 1 | X, z) = b' X + az + e,$$

where  $y=1$  if the loan application is accepted;  $X$  is a set of borrower, property, and financial covariates,<sup>6</sup> conceptually including all factors used in loan underwriting; and  $z$  is an indicator variable for the presence of attribution for varying homestead exemption

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<sup>6</sup> In particular, these covariates include excess back-end ratio, excess loan-to-value ratio, credit score, and a prior bankruptcy indicator.

levels across states. The variable  $e$  represents an additional unobserved random error term. The parameter of interest, then, is  $a$ , and a negative value significantly different from zero is taken as a measure of credit constraint based on the homestead exemption levels across states.

## **2.2 Data**

### **2.2.1 First Mortgages**

The data for first mortgages are primarily from a large financial institution (proprietary in nature) that originated loans nationally.<sup>7</sup> A stratified random sample of one-to-four-family, conventional, and non-purchased home mortgage loan applications are drawn from the HMDA Loan Application Register (LAR) between January and September 1999.<sup>8</sup> We exclude applications that were withdrawn and closed for incompleteness. The total sample size is 570 loan files. We randomly selected 284 mortgage applications that were approved and 290 mortgage applications that were denied.<sup>9</sup>

Furthermore, credit and collateral information was also retrieved manually from the underwriting documents. Data collection/entry and the quality assurance process took over nine months to complete. More specifically, it took close to a day to transcribe and verify each file into a usable data set. Experienced internal and external consultants were

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<sup>7</sup> It is true that it is hard to infer about the aggregate impact of exemption laws on credit supply by looking at data from a single bank. However, looking at a random sample of loans should attenuate some of these concerns.

<sup>8</sup> See Canner and Passmore (1994) for a general description of the HMDA data set. The data have mainly been used to analyze discrimination in lending to minority households.

<sup>9</sup> Dietrich (2000) has shown that this sampling procedure can offer substantial efficiency gains over random sampling or stratification based on the outcome variables alone.

employed for data transfer from the underwriting documents to electronic spreadsheets. Extensive data validation and data integrity checks were performed to ensure quality control. In all, there were 91 separate data elements collected for each loan file. They consisted of 22 HMDA data elements, 23 loan record identification elements, 18 credit history elements, 11 collateral elements, 11 income elements, and 6 asset elements. Overall sample size was consistent with samples used in bank-specific models estimated in Stengel and Glennon (1999).<sup>10</sup> Since the manual retrieval of the data was expensive, time consuming and prone to human errors, the bank, in consultation with the Office of the Comptroller of the Currency (the regulator), decided to follow a stratification process outlined in Stengel and Glennon (1999) and Dietrich (2000).

Completing the preliminary regression analysis and following the underwriting guidelines of this financial institution, we determined that the following variables would be included in our study: 1) excess back-end ratio, or the ratio between debts (including principal, interest, property taxes, and insurance plus other monthly payments) to gross monthly income; 2) excess loan-to-value ratio, or the excess of loan-to-value ratio over the threshold for the loan type and program, set equal to zero if the loan-to-value ratio is below the threshold or if the applicant obtained private mortgage insurance (PMI), 3) credit score, 4) previous bankruptcy indicator and previous charge-off indicator, 5) self-employment indicator, implying that the applicant must have been in business for over two years, 6) insufficient cash indicator, 7) individual borrower's years in school, and 8) individual borrower's income and income squared.<sup>11</sup>

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<sup>10</sup> In Stengel and Glennon (1999), their sample consisted of 766, 729, and 522 loan applications from three different banks.

<sup>11</sup> Other variables were modeled but were found not to be significant. They included borrower's age, U.S. Census tract income levels, loan amounts, and excess front-end ratio. There were a couple of variables that

We also added information concerning the homestead exemptions in each consumer's state of residence (see Tables 1 and 2). Homestead exemptions vary widely—from zero in two states to unlimited in eight states. About one-third of the states also allow their residents to choose between federal bankruptcy exemptions and the state's exemptions. In these states, we have assigned the highest of the two exemption levels. Many states also allow married couples that file for bankruptcy to take higher exemptions, usually double. We have also collected individual application data on the marital status of the applicant. Consistent with prior literature, we model the state property, homestead, and garnishment levels as continuous variables (see, Berkowitz and Hynes, 1999; Lin and White, 2001; and Chomsisengphet and Elul, 2006).

### **2.2.2 Second Mortgages**

The data for second mortgages are from a large financial institution (proprietary in nature) that originates home equity loans and lines (to reiterate, these data are drawn from a different organization than the one from which data for first mortgages are drawn). Our sample consists of 3,237 home equity loans and lines issued to owner-occupants and originated from January 2000 to [through?] June 2001. In this sample, 1,611 were approved and 1,626 were denied. Data collection/entry and the quality assurance process took over six months. Extensive data validation and data integrity checks were performed to ensure quality control. We also added all the non-HMDA fields that we collected for the first mortgages.

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were seen in other studies and have been included in this study for consistency. These include income, income squared, and years of schooling.

### **3. Results**

Tables 3 and 4 provide some summary statistics for first and second mortgages, respectively. They provide some interesting differences between the credit behavioral characteristics of the applicants who were accepted for mortgages and those who were declined for mortgages.

The statistics in Tables 3 and 4 suggest that, on the average, the excess back-end ratio (debt-to-income ratio) for the applicants who are accepted for a mortgage is lower than for the applicants who are denied. Furthermore, the collateral index shows that applicants who are accepted for a mortgage have higher collateral than those who are denied. Similarly, other statistics suggest similar differences among the accepted and denied applicants. Other informative variables are: 1) credit score, 2) a prior bankruptcy indicator, and 3) a prior charge-off indicator. All these variables also show that applicants who are accepted for a mortgage have favorable credit behavioral characteristics. Meanwhile, age, number of years at a job, loan amount, and years of schooling do not show clear trends that differentiate the accepted applicants from the denied ones.

#### **3.1 Regression results**

The regression results are presented in Tables 5 and 6 for the first and second mortgages, respectively. We treat different ethnic minorities individually. The results show that the most important variables in the decision process of an applicant being accepted for a mortgage loan include excess back-end ratio (debt-to-income ratio), excess loan-to-value ratio, credit (FICO) bureau score, prior bankruptcy indicator, prior charge-

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off indicator, self-employment indicator, collateral indicator, and income. Income squared and years of schooling are statistically insignificant. The results also show that the  $p$  values for the minority dummies were statistically insignificant. As documented in the previous literature (Stengel and Glennon, 1999; and Agarwal, Li, and Mielnicki, 2003), once you control for the bank-specific variables, race and demographic variables always turn out to be statistically insignificant in the credit availability decision.<sup>12</sup> It is important to discuss the sign of the coefficients on the variables. On the one hand, the coefficients on the debt-to-income ratio, loan-to-value ratio, prior bankruptcy indicator, prior charge-off indicator, and self-employment indicator are all negative; this implies the higher the values of these variables are, the higher the probability of being denied for a mortgage is. On the other hand, the coefficients on credit score, collateral, and income are all positive and statistically significant; this means consumers with higher income, collateral and less riskiness are more likely to be approved for a loan. Finally, we have a dummy for “no recourse.” Essentially this means that if a borrower relinquishes the house to the lender, the lender cannot go after the borrower for any other assets or income; only the house secures the loan—that is, the lender has no recourse on the loan beyond the house. This allows borrowers in no-recourse states to walk away from their mortgages without declaring bankruptcy.<sup>13</sup>

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<sup>12</sup> Agarwal, Li, and Mielnicki (2003) used the same data to test for discrimination in the mortgage market. Essentially, they use only the variables in the HMDA data set. Our results are fairly comparable to theirs for the HMDA variables.

<sup>13</sup> There are eight no-recourse states in the U.S.—namely, California, Oregon, Washington, Alabama, Arkansas, Montana, North Dakota, and Minnesota. Some of these states overlap with the high or unlimited homestead exemptions. Hence, the no-recourse effect will go in the opposite direction of the homestead exemptions, providing additional power to our test.

Our discussion has looked only at the estimates for the control variables, but now we look at the variable of interest. The bankruptcy exemption level variable is statistically insignificant. This result suggests that credit availability does not vary with the homestead exemption levels across states. These results are very robust, and they have withstood a variety of tests. We sub-sampled the data and conducted similar analysis, but the results did not change qualitatively. Moreover, the results are consistent in both versions of the model—that is, where we control for all the racial/ethnic minorities with a single dummy variable or with multiple dummy variables. The goodness-of-fit measures are consistent with the empirical literature.

Hence, following a bank-specific approach, we find that bankruptcy exemptions laws across states in the U.S. do not have any statistically significant impact on the credit availability for mortgage loans.

#### **4. Conclusion**

In this study, we look at a random sample of 570 first mortgages and 3,237 second mortgages (home equity loans and lines) to empirically test whether homestead exemptions across states play any part in the underwriting process for mortgages originated at a large financial institution. We use a bank-specific approach in our analysis. The results indicate that the dummies for homestead exemptions are statistically insignificant. Our findings are robust and have withstood a variety of stress tests. Our finding also shows that individual borrower's financial and creditworthiness are the only determinants of being accepted or declined for a home mortgage (both first and second mortgages) at these financial institutions. As we outlined in the introduction, the literature

on the impact of homestead exemption laws on credit availability has been mixed. While, Gropp, Scholz, and White (1997) and Lin and White (2001) find that exemption laws negatively impact credit availability, Berkowitz and Hynes (1999) find that exemption laws positively impact credit availability. Finally, Chomsisengphet and Elul (2006) find that exemption laws do not have any impact on credit availability. Chomsisengphet and Elul show that, once you control for credit scores (even at the zip code level), the exemption levels are statistically insignificant. Since Chomsisengphet and Elul do not mimic the loan underwriting process, we follow the bank-specific approach outlined by Glennon and Stengel (1999) and find that after controlling for the credit scores and other underwriting variables, the exemption levels are statistically insignificant.

While we do not find any impact of the exemption laws on credit availability, it is possible that exemption laws may impact the pricing of credit. While this is not the focus of our paper, this is an open question for future research. We believe that more research is necessary to determine the effects of homestead and property exemption laws on credit *demand* as opposed to credit *supply* for both the secured and unsecured credit markets. Such research is particularly needed in light of the recent law that standardizes federal bankruptcy exemptions. Despite the apparent need for research on personal bankruptcy laws, the number of academic papers on this topic is quite limited, especially compared with the literature on its more seductive cousin, the Chapter 11 reorganization.

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State	Home	Property	State	Home	Property
AK	\$54,000	\$8,000	MT	\$60,000	\$5,700
AL	\$5,000	\$6,925	NC	\$10,000	\$5,000
AR	\$1,000,000	\$1,400	ND	\$80,000	\$7,425
AZ	\$100,000	\$9,250	NE	\$12,500	\$2,400
CA	\$50,000	\$5,000	NH	\$30,000	\$11,350
CO	\$30,000	\$4,800	NJ	\$15,000	\$10,700
CT	\$75,000	\$7,100	NM	\$30,000	\$8,050
DE	\$0	\$5,000	NV	\$125,000	\$4,500
FL	\$1,000,000	\$2,000	NY	\$10,000	\$7,400
GA	\$5,000	\$5,400	OH	\$5,000	\$2,900
HI	\$20,000	\$2,000	OK	\$1,000,000	\$10,925
IA	\$1,000,000	\$10,600	OR	\$25,000	\$9,150
ID	\$50,000	\$5,750	PA	\$15,000	\$10,700
IL	\$7,500	\$7,125	RI	\$15,000	\$10,700
IN	\$7,500	\$4,000	SC	\$15,000	\$10,700
KS	\$1,000,000	\$24,650	SD	\$1,000,000	\$3,250
KY	5000%	\$6,500	TN	\$5,000	\$7,925
LA	\$15,000	\$15,125	TX	\$1,000,000	\$30,000
MA	\$15,000	\$12,200	UT	\$10,000	\$2,500
MD	\$0	\$6,000	VA	\$5,000	\$14,750
ME	\$12,500	\$2,900	VT	\$75,000	\$9,400
MI	\$15,000	\$10,700	WA	\$30,000	\$12,675
MN	\$200,000	\$13,000	WI	\$40,000	\$7,200
MO	\$8,000	\$3,000	WV	\$15,000	\$3,200
MS	\$75,000	\$10,000	WY	\$15,000	\$2,400

Source: Agarwal, Sumit, Chulin Liu, and Lawrence Mielnicki, 2002, "Exemption laws, consumer delinquency, and bankruptcy behavior: an empirical analysis of credit card data," *The Quarterly Review of Economics and Finance*, 197, 1-17.

Table 2: State Bankruptcy Exemptions – Changes over the Years			
Year	State	Homestead Exemptions	Property Exemptions
1994	MI	\$7,500 to \$15,000	\$5,350 to \$10,700
1994	NJ	\$7,500 to \$15,000	\$5,350 to \$10,700
1994	PA	\$7,500 to \$15,000	\$5,350 to \$10,700
1994	RI	\$7,500 to \$15,000	\$5,350 to \$10,700
1994	SC	\$7,500 to \$15,000	\$5,350 to \$10,700
1995	ME	\$7,500 to \$12,500	\$1,600 to \$2,900
1995	VT	\$30,000 to \$75,000	
1996	CA		\$2,500 to \$5,000
1996	MN	\$1,000,000 to \$200,000	
1997	MT	\$40,000 to \$60,000	
1997	NE	\$10,000 to \$12,500	\$1,500 to \$2,400
1997	NV	\$95,000 to \$125,000	\$1,500 to \$4,500
1997	UT	\$8,000 to \$10,000	\$1,500 to \$2,500
1997	WV	\$7,500 to \$15,000	\$1,600 to \$3,200
1997	WY		\$2,000 to \$2,400

Source: Agarwal, Sumit, Chulin Liu, and Lawrence Mielnicki, 2002, “Exemption laws, consumer delinquency, and bankruptcy behavior: an empirical analysis of credit card data,” *The Quarterly Review of Economics and Finance*, 197, 1-17.

Table 3: Summary Statistics for First Mortgages

Variable	Accepted		Denied	
	Mean	Std	Mean	Std
Excess Debt-to-Income	3.18	1.38	7.86	5.93
Excess Loan-to-Value	0.05	0.03	0.87	0.52
Credit Score	702	58	662	70.24
Prior Bankruptcy	0.04%	0.02%	0.09%	0.05%
Prior Charge-off	0.13%	0.07%	0.27%	0.13%
Self-employed	9%	7%	17%	8%
Collateral	1.55	1.21	1.34	0.94
Years in School	14.79	4.44	14.18	5.93
Income	\$ 68,396	\$ 32,284	\$ 55,204	\$15,835
Loan Amount	\$126,533	\$ 50,383	\$142,906	\$60,239
Employed	90%	27%	72%	18%
Age	44	16	43	14.39
Minority	52%	28%	47%	22%
Cash Reserves	\$ 84,939	\$ 38,439	\$ 31,047	\$12,218
Homestead Exemptions	\$203,283	\$348,918	\$205,048	\$351,921
Property Exemptions	\$9,482	\$6,592	\$9,591	\$6,945
Number of States	50		50	

Table 4: Summary Statistics for Second Mortgages

Variable	Accepted		Denied	
	Mean	Std	Mean	Std
Excess Debt-to-Income	2.55	1.58	9.73	4.73
Excess Loan-to-Value	0.06	0.01	0.36	0.48
Credit Score	728	57	653	106
Prior Bankruptcy	0.10%	0.32%	0.86%	2.81%
Prior Charge-off	0.02%	0.01%	0.09%	0.11%
Self-employed	12%	8%	19%	10%
Collateral	1.84	1.29	1.62	1.00
Years in School	13.14	4.55	12.20	7.16
Income	\$ 71,148	\$37,053	\$ 71,741	\$19,546
Loan Amount	\$ 52,602	\$62,642	\$ 68,947	\$69,543
Job	84%	34%	72%	19%
Age	51.77	17.48	53.62	17.22
Minority	19%	29%	24%	43%
Cash Reserves	\$ 76,496	\$45,836	\$ 34,580	\$14,694
Homestead Exemptions	\$201,965	\$369,922	\$204,083	\$370,583
Property Exemptions	\$9,773	\$6,293	\$9,781	\$6,822
Number of States	50		50	

Table 5: Regressions Results for First Mortgage Approval			
Independent Variables	Estimate	Std-Error	t-stat
Intercept	-8.8560	1.5899	-5.57
Homestead Exemptions	-0.1545	0.1870	-0.83
Property Exemptions	-0.4799	0.3908	-1.23
No-Recourse State Dummy	-0.2826	0.3770	-0.75
Garnishment Exemptions	0.4790	0.3674	1.30
African American	-0.1063	0.3134	-0.34
Asian American	0.4977	0.2980	1.67
Hispanic American	0.5775	0.2840	2.03
Excess DTI	-0.0461	0.0136	-3.39
Excess LTV	-0.1363	0.0317	-4.30
Credit Score	0.0096	0.0019	4.95
Prior Bankruptcy Indicator	-1.3782	0.6009	-2.29
Prior Charge-off Indicator	-0.6529	0.2812	-2.32
Self-employed Indicator	-0.8140	0.3215	-2.53
Collateral	1.5810	0.3393	4.66
Income	0.0012	0.0005	2.35
Income-Squared	-0.0010	0.0001	-9.82
Schooling	0.0144	0.0403	0.36
Number of Observations	570		
Pseudo R-squared	0.29		

Independent Variables	Estimate	Std-Error	t-stat
Intercept	-7.0411	1.3314	-5.29
Homestead Exemptions	-0.2838	0.3927	-0.72
Property Exemptions	-0.3928	0.3817	-1.03
No-Recourse State Dummy	-0.1094	-0.1048	1.04
Garnishment Exemptions	0.4783	0.8382	0.57
African American	-0.0956	0.1002	-0.95
Asian American	0.1943	0.1772	1.10
Hispanic American	0.0660	0.0467	1.41
Excess DTI	0.5462	0.0800	6.83
Excess LTV	-0.3350	0.1649	-2.03
Credit Score	0.4125	0.1586	2.60
Prior Bankruptcy Indicator	-0.2824	0.1183	-2.39
Prior Charge-off Indicator	-0.5133	0.1029	-4.99
Self-employed Indicator	-0.4633	0.1060	-4.37
Collateral	0.5356	0.2427	2.21
Income	0.0022	0.0014	1.52
Income-Squared	-0.0007	0.0003	-2.42
Schooling	0.0892	0.0312	2.86
Number of Observations	3237		
Pseudo R-squared	0.19		